

MuAnalysis

Leaders in Diagnostic Services
for Microelectronics and Photonics

We help designers and manufacturers

- Reduce design cycle time
- Minimize customer product returns
- Maximize product yields

MuAnalysis provides professional analytical and laboratory services to OEMs and to manufacturers serving the microelectronics, electronics, and photonics industries. The MuAnalysis team specializes in failure analysis, materials analysis and reliability testing. Our scientists have a proven record of saving time and money for our clients.

Reduce Design Cycle Time with MuAnalysis Analytical Services

The MuAnalysis team has decades of experience with circuit board and electronic manufacturing as well as design, fabrication, and assembly processes.

Minimize Customer Returns with MuAnalysis Failure Analysis

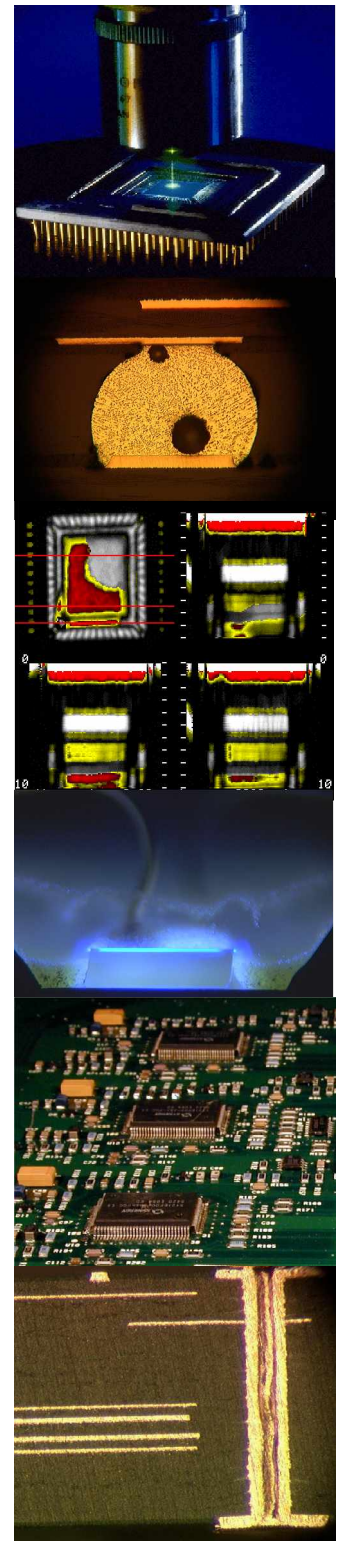
You may not be at fault. The MuAnalysis failure analysis team has in-depth experience with a wide range of manufacturing processes and materials including discrete and semiconductor components based on silicon, GaAs, InP, SiC and GaN technologies. Let MuAnalysis analyze your customer returns so you can dedicate your resources to improving your process.

Improve Yields with MuAnalysis Reliability Testing

MuAnalysis reliability testing analyzes all types of devices against a range of commercial and military-standard operating conditions providing you with data to improve your yields.

Professional and Confidential Services

MuAnalysis services are designed for maximum efficiency and rapid turn around time. Detailed written reports are provided upon request. All MuAnalysis services are performed in a secure, monitored facility and are subject to non-disclosure conditions. MuAnalysis is registered with the Controlled Goods Registration Program.



muanalysis.com

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MuAnalysis Technical Services Description

Scanning Electron Microscopy (SEM)

- Digital imaging
- Elemental chemical analysis by EDX
- Sub-micron thin film measurements

Counterfeit detection and materials verification

- Authenticity verification of electronic components per AS5553
- Disjointment and RoHS screening
- Construction analysis – package, structures and process definition
- Yield and process defect analysis
- Solder joint integrity analysis
- DPA per MIL-STD-1580

Materials Analysis

- Raman micro-spectroscopy
- FTIR micro-spectroscopy
- Confocal Laser Scanning microscopy
- UV fluorescence imaging
- Microcontamination analysis

Failure Analysis of ICs, PWBs, LEDs, discrete passive and active components

- X-ray radiography
- Scanning acoustic microscopy
- Decapsulation and package opening
- Repackaging
- Reballing
- Precision cross sectioning, delayering, staining, and chemical techniques
- Plasma etching
- Automated latch-up and curve trace testing
- Precision mechanical electrical probing
- RF Microprobing
- Liquid crystal fault isolation
- Emission microscopy (EMMI)
- Optical Beam Induced Current (OBIC) analysis
- Infra-red (IR) optical microscopy
- High-resolution optical microscopy

Reliability Testing per JEDEC JESD47, MIL-STD-883 or 750, Telcordia GR468

- Electrostatic Discharge (HBM,MM,SDM)
- Latch-up
- Temperature humidity bias
- Highly Accelerated Stress Test (HAST)
- Autoclave
- High/low temperature storage
- Burn-in/Life test, static or dynamic
- Power Cycling
- Solderability
- Preconditioning
- Thermal cycling and thermal shock

MuAnalysis Consulting Services

MuAnalysis provides materials, reliability and failure analysis consulting services to electronics companies, including:

- Qualification program definition
- Vendor /supplier assessments
- Design consultations for reliability/FA
- Data analysis
- Reliability monitoring
- Yield improvement consulting
- Fab support services
- ESD audits
- Customized seminars/educational programs
- Documentation and formal reports

Other services, tests and diagnostic techniques are available. Please inquire.

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